



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/282,748 | 03/31/1999 | HYONG S. KIM | FORE-39 | 9050 |

7590 01/27/2003

ANEL M SCHWARTZ
ONE STERLING PLAZA
SUITE 304
201 N CRAIG STREET
PITTSBURGH, PA 15213

EXAMINER

TRAN, PHUC H

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 01/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/282,748 | KIM ET AL. |
| Examiner | Art Unit | |
| PHUC H TRAN | 2666 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 November 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-24 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Regarding to claims 1, 3, 12, & 18, the “unknown traffic characteristics with no parameters specified” is not disclosed in the detail description in such a way as to reasonably convey to one skilled in the relevant art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano (U.S. Patent No. 6240102 B1) in view of Ganmukhi et al. (U.S. Patent No. 5850399).

- With respect to claims 1, 3-6, 9-11, 13, & 18, Asano teaches an ATM communication system (e.g. Fig. 2 shows) comprising a source which produces traffic for connections having

known traffic characteristics and unknown traffic characteristics (e.g. ATM networks has four service categories CBR, VBR, ABR and UBR); a network on which traffic travels, the source connected to the network, the source sends the traffic having known traffic characteristics and unknown traffic characteristics onto the network (e.g. data transmits from terminal a to b in Fig. 2); and a destination which is connected to the network and receives the traffic having known traffic characteristics and unknown traffic characteristics (e.g. terminal b receives data have CBR, VBR, ABR or UBR). Asano fails to teach the unknown traffic includes weighted priorities. Ganmukhi teaches UBR with many classes, which bases on the data information (e.g. the UBR+ and UBR with low priority col. 2, lines 26-28, Fig. 2 blocks 170, 180). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the method of assignment the UBR into difference class or weight priorities that bases on the priority of data for transmitting data with QoS.

- With respect to claim 2, Asano discloses a switch connected to the network, which switches the traffic from the source to the destination (e.g. block 301 in Fig. 3).
- With respect to claims 7, 16, & 22, Asano teaches the traffic known traffic characteristics is ABR, CBR, VBR or a combination of the same (e.g. col. 1, lines 22-25).
- With respect to claims 8 & 20, Asano also discloses a signaling message that identifies to switches of the network the weight of each UBRw VC (col. 4, lines 39-45).
- With respect to claims 12, 17, 19, 21, & 23-24, Asano teaches a switch for switching traffic on an ATM network from a source to a destination (e.g. Fig. 2 shows) comprising: a mechanism receives traffic for connections having unknown traffic characteristics (e.g. system for routing a UBR connection); a mechanism for transmitting the traffic for connections to the

network, the transmitting mechanism connected to the receiving mechanism (e.g. data transmits from terminal a to b in Fig. 2). Asano fails to teach the traffic includes traffic with weighted priorities and traffic without weighted priorities; and a scheduler for scheduling when the connections having traffic with unknown characteristics having weighted priorities are to be transmitted to the network, the scheduler connected to the transmitting mechanism and the receiving mechanism. Ganmukhi teaches UBR with many classes, which base on the data information (Fig. 2 blocks 170, 180) and the scheduler schedules information data to transmit to the network by utilizing weighted round robin (col. 5, lines 6-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the method of assignment the UBR into difference class or weight priorities that bases on the priority of data for transmitting data with QoS and the round robin scheduler into Asano's invention for fairly and top down transmit the information data between source and destination.

- With respect to claim 14, Asano disclose including a memory for storing the connections, the memory connected to the receiving mechanism, the scheduler and the transmitting mechanism (block 304 in Fig. 3).
- With respect to claim 15, Asano also teaches wherein the memory includes buffers, which are allocated according to the VC, weight to give higher priority to the VCS with higher weight (e.g. Fig. 4 & 5).

Response to Arguments

5. Applicant's arguments filed 11/14/2002 have been fully considered but they are not persuasive.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
January 20, 2003

PT
DANG TRAN
PATENT EXAMINER